STATEMENT OF CONSIDERATIONS

REQUEST BY THE BOEING COMPANY FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-04NT42237; W(A)-04-085, CH-1265

The Petitioner, The Boeing Company, acting through its Rocketdyne Propulsion & Power Business Unit, (Boeing) was awarded this cooperative agreement for the performance of work entitled, "Development of Technologies and Capabilities for Coal Energy Resources." The purpose of the cooperative agreement is to develop technologies that improve availability and efficiency of gasification-based power plants while reducing plant capital and operations costs. Boeing will build and demonstrate a commercial scale long-life rapid-mix injector, test advanced cooled refractory liners in a gasifier environment, and develop conceptual designs, hardware definition and cost estimate of a novel 24 tpd highly efficient, long-life entrained flow gasifier pilot plant.

The total estimated cost of the cooperative agreement is \$6,249,604 with the DOE share being \$4,999,683 or 80%, while the remaining cost share of 20%, or \$1,249,921, will be provided by Boeing. The period of performance is from September 29, 2004 through March 31, 2007.

In its response to question 5 of the attached waiver petition, Boeing has described its technical competence in the field of gasification-based power plants. It has been involved in pulverized coal entrained flow coal gasification since 1974, and some of this involvement included participation with DOE through cooperative agreements. Boeing's work on these agreements has resulted in issued U.S. patents. In addition to this early development work, Boeing has been working in gasification technology that could be related to new advances in rocket engine technology. This work has resulted in several issued patents. Boeing has provided a detailed description of these patents, along with pending patents and invention disclosures, and its technological competence in this field, in Exhibit 1 to its waiver petition. Boeing's response demonstrates its technical competency in the field of gasification-based power plants.

In its response to question 10 of the attached waiver petition, Boeing states that there are three major licensors of gasification processes (GE Energy, Shell, and ConocoPhillips). These companies use competitive, mature technologies. Boeing states that its technology uses a technology that must compete with the established technologies of these companies, and due to their large market size and operational experience, a barrier to entry exists within which Boeing's new technology must compete. Thus grant of the waiver will not place Boeing in a preferred or dominate position in this field, and is likely to have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights–Waiver clause in conformance with 10 CFR 784.12, and without paragraph (k), Background Patents, wherein Boeing has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Boeing agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Boeing agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the

Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mark P. Dvorscak

Assistant Chief Counsel

Intellectual Property Law Division

Date: May 10.

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE

George Rudins

Deputy Assistant Secretary

Office of Fossil Energy

Date:

APPROVAL

Paul A. Gottlieb

Assistant General Counsel for

Technology Transfer and Intellectual

Property, GC-62

Date:

(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.